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EXAMINER

THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2625

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/814,700	Applicant(s) HART ET AL.	
	Examiner James A. Thompson	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008 and 11 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 and 51-123 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 and 51-123 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/11/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01 August 2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 01 August 2008 have been fully considered but they are not persuasive. Applicant's arguments are based on the present amendments to the claims. The previously cited prior art references fully teach the presently amended claims, as set forth in detail below in the prior art rejections. Further, the newly added claims are fully addressed by the prior art rejections set forth below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-4, 7-8, 15-16, 18-23, 35, 42-43, 47, 62, 65, 74, 78-81, 84-85, 92-93, 95-100, 112-120 and 123 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056) and Chino (US-6,118,888).**

Regarding claims 1 and 78: Sugiyama discloses a multifunction printer (figure 1 of Sugiyama) for printing time-based media (column 3, lines 11-15 of Sugiyama – *video data is time-based media*), the multifunction printer comprising: a communication interface (figure 1(11) of Sugiyama) for receiving time-based media data from a media source (column 3, lines 11-20 of Sugiyama); a processor (figure 1 (31) of Sugiyama) within the multi-function printer (as can be seen in figure 1 of Sugiyama) for performing a user-selected multimedia function on the time-based media data and for generating a

Art Unit: 2625

printable representation comprising results of the user-selected multimedia function applied to the time-based media (figure 4 and column 5, lines 45-64 of Sugiyama – *particular frames are captured and organized in a mosaic for printing based on settings and criteria entered by user*); a user interface display (figure 1(18-25) of Sugiyama) on the multifunction printer (as can be seen in figure 1 of Sugiyama) for providing data to the user (column 3, lines 34-48 of Sugiyama); an input device (figure 1(21-25) of Sugiyama) for receiving from the user a selection of the multimedia function from the plurality of selectable multimedia functions (column 3, line 41 to column 4, line 8 of Sugiyama – *input keys provide a variety of functions, including number of sub-frames for mosaic pattern, and frames to be captured*); a first output device (figure 1(30-33) of Sugiyama) for receiving the printable representation from the processor and for printing the printable representation to a tangible medium (column 4, lines 3-8 and lines 35-42 of Sugiyama); and a second output device (figure 1(18-20) of Sugiyama) coupled to the processor (as can be seen in figure 1 of Sugiyama) for receiving the printable representation from the processor and for outputting the electronic output including the printable representation (column 5, lines 2-7 of Sugiyama).

Sugiyama does not disclose expressly that the user interface display displays a function selection menu comprising a plurality of user-selectable audio range selection functions and a plurality of user-selectable video range selection functions to be applied to the time-based media by the processor; that said input device receives from the user a selection of the multimedia function from the plurality of user-selectable video range selection functions and the plurality of audio range selection functions displayed on the function selection menu; that said printing is performed automatically; and that said display and said second output device are separate devices.

Steele discloses a user interface display (figure 6 of Steele) that displays a function selection menu comprising a plurality of user-selectable video range selection functions to be applied to the time-based media by the processor (column 7, line 62 to column 8, line 2 of Steele); an input device (figure 7 (54-57) of Steele) that receives from the user a selection of the multimedia function from the plurality of user-selectable video range selection functions displayed on the function selection menu (column 8, lines 24-44 of Steele); automatically identifying a portion of time-based media data to be output (column 7, lines 41-54 of Steele); and using separate displays for a user interface (figure 6 and column 7, line 62 to column 8, line 2 of Steele) and an output device (figure 7(52) and column 8, lines 10-23 of Steele).

Sugiyama and Steele are combinable because they are from the same field of endeavor, namely the processing, control and output of video data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to perform identification automatically based on preselected criteria

Art Unit: 2625

and displaying the associated timeline to the user, as taught by Steele. By combination with Sugiyama, this would result in performing printing automatically. The motivation for doing so would have been to more efficiently process the video image data and allow the user to make updated changes based on the obtained results. Also, using separate electronic displays for the user interface and the second output device would have been an obvious modification to make for one of ordinary skill in the art at the time of the invention, and would have generated predictable results, namely separate views for interfacing with computer and viewing the resultant output. Displaying the available selection to the user on a user display, as taught by Steele, would also have been obvious and a part of the normal development in the art. Allowing a user to see the selections available on a screen, rather than simply having keys available, creates an easier to use interface, as would have been readily recognized and predicted by one of ordinary skill in the art at the time of the invention. Therefore, it would have been obvious to combine Steele with Sugiyama.

Sugiyama in view of Steele does not disclose expressly that the user interface display displays a function selection menu comprising a plurality of user-selectable audio range selection functions to be applied to the time-based media by the processor; and that said input device receives from the user a selection of the multimedia function from the plurality of audio range selection functions displayed on the function selection menu.

Chino discloses selecting one of a plurality of user-selectable audio range selection functions to be applied to the time-based media by the processor (column 14, lines 8-18 of Chino – *control of audio range, including whether or not audio is input, along with noise control is selected by user*).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the user to select one of a plurality of user-selectable audio range selection functions to be applied to the time-based media by the processor, as taught by Chino. By combination with Sugiyama in view of Steele, the user interface would therefore also display a function selection menu comprising a plurality of user-selectable audio range selection functions to be applied to the time-based media by the processor, as is similarly done for the video range selection functions taught by Steele. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino) and allow the user the ability to select desired functions. Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claims 1 and 78.

Further regarding claim 78: The printer of claim 1 performs the method of claim 78.

Further regarding claims 2 and 79: Chino discloses selecting a range of audio data in response to received input from the user (column 14, lines 8-18 of Chino – *only the audio data that is intended to be input by the user is input in response to the appropriate user input, while any other noise is ignored by the system*). By combination with Sugiyama in view of Steele, the received input from the user is due to the user selecting one of the audio range selection functions from the function selection menu, as set forth in the prior art rejection of claim 1 above.

Further regarding claims 3 and 80: Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino – *the system detects when audio data is intended to be input by the user, while any other noise is ignored by the system*).

Further regarding claims 4 and 81: Chino discloses that an audio event is detected (column 14, lines 8-11 of Chino) based on specific criteria that are to be met to the satisfaction of a computer automated system (column 14, lines 11-19 of Chino). Thus, a confidence level associated with the audio event detection is determined.

Further regarding claims 7 and 84: Chino discloses applying a sound source localization function to time-based media data (column 13, lines 5-14 of Chino – *by using the gaze object detection portion of the multi-modal interface apparatus, the audio sound source localization is determined*).

Further regarding claims 8 and 85: Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino – *the system detects when audio data is intended to be input by the user, while any other noise is ignored by the system*).

Further regarding claims 15 and 92: Steele discloses selecting a range of video data in response to the user selecting one of the video range selection functions from the function selection menu (column 6, lines 13-17 and column 8, lines 24-31 of Steele).

Further regarding claims 16 and 93: Steele discloses applying a video event detection function to the time-based media data (column 7, lines 49-54 of Steele).

Further regarding claims 18 and 95: Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Further regarding claims 19 and 96: Chino discloses applying a clustering function to the time-based media data to merge multiple instances of a face into a representative image (column 26, lines 1-12 of Chino).

Further regarding claims 20 and 97: Chino discloses applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Further regarding claims 21 and 98: Chino discloses applying an optical character recognition function to time-based media data (figure 3(102j) and column 7, lines 14–18 of Chino).

Further regarding claims 22 and 99: Chino discloses applying a clustering function to the time-based media data to merge similar results of the optical character recognition (column 7, lines 15-21 of Chino). The particular language input by the user, such as German, Russian and Chinese, which use different character sets, is detected. The particular language determines the cluster of characters to use in optical character recognition (column 7, lines 15-21 of Chino).

Further regarding claims 23 and 100: Chino discloses applying a motion analysis function to time-based media data (figure 3(102f) and column 7, lines 33-38 of Chino).

Regarding claims 35 and 112: Sugiyama discloses that the multimedia function includes applying a visual inspection function to the time-based media data (column 4, lines 32-34 of Sugiyama – *user must visually inspect the displayed image to see if it is desirable to print*).

Regarding claim 42: Sugiyama in view of Steele does not disclose expressly that said user interface display is configured to allow a user to control audio sound localization hardware.

Chino discloses controlling audio sound localization hardware (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound localization is determined.

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface display to allow a user to control audio sound localization hardware, as taught by Chino. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 42.

Regarding claim 43: Sugiyama in view of Steele does not disclose expressly that said user interface display is configured to allow a user to control motion detection hardware.

Chino discloses controlling motion detection hardware (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface display to allow a user to control motion detection hardware, as taught by Chino. The suggestion for doing so

Art Unit: 2625

would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 43.

Further regarding claim 47: Steele discloses that the user interface display is configured to allow a user to control a world wide web display (column 5, lines 52-55 of Steele).

Further regarding claim 62: Chino discloses controlling as an output device audio sound localization hardware (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound localization is determined.

Further regarding claim 65: Steele discloses that the second output device is a world wide web display (figure 7 and column 5, lines 52-55 of Steele).

Regarding claim 74: Sugiyama in view of Steele does not disclose expressly that the second output device is hardware for capturing data from an electronic pen.

Chino discloses controlling as an output device hardware for capturing data from an electronic pen (figure 3(102i) and column 7, lines 14-16 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of digital data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use hardware for capturing data from an electronic pen, as taught by Chino. The suggestion for doing so would have been that an electronic pen is simply another useful output device that provides digital data a user may wish to obtain (figure 3 and column 6, lines 66-67 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 74.

Regarding claim 113: Sugiyama in view of Steele does not disclose expressly that the user interface display on the multifunction printer further displays an input source selection menu comprising a plurality of user-selectable input sources, wherein the input device further receives a selection of an input source from the plurality of user-selectable input sources, and wherein the communication interface receives the time-based media data from the input source selected by the user.

Chino discloses that the user interface display further displays an input source selection menu comprising a plurality of user-selectable input sources, wherein the input device further receives a selection of an input source from the plurality of user-selectable input sources, and wherein the communication interface receives the time-based media data from the input source selected by the user

Art Unit: 2625

(figure 1(101,102,106); column 6, lines 32-36; and column 6, line 66 to column 7, line 11 of Chino – *multiple input source to select between, several receive time-based media data*).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a plurality of different user-selectable input device. The suggestion for doing so would have been that there are many different possible means in the art to input time-based media data. Providing a possible input for the various types of time-based media data is common in the art and produces predictable results, namely that there are a variety of inputs to choose from and a more versatile system. Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 113.

Regarding claim 114: Sugiyama in view of Steele does not disclose expressly that the user interface display on the multifunction printer further displays an output source selection menu comprising a plurality of user-selectable electronic output sources, wherein the input device further receives a selection of an electronic output source from the plurality of user-selectable output sources, and wherein the second output device outputs the electronic output to the electronic output source selected by the user.

Chino discloses that the user interface display on the multifunction printer further displays an output source selection menu comprising a plurality of user-selectable electronic output sources, wherein the input device further receives a selection of an electronic output source from the plurality of user-selectable output sources, and wherein the second output device outputs the electronic output to the electronic output source selected by the user (figure 5 and column 7, line 65 to column 8, line 21 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include a plurality of different user-selectable output device. The suggestion for doing so would have been that there are many different possible means in the art to output time-based media data. Providing a possible output for the various types of time-based media data is common in the art and produces predictable results, namely that there are a variety of output to choose from and a more versatile system. Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele to obtain the invention as specified in claim 114.

Further regarding claim 115: Steele discloses that the user interface display outputs the function selection menu responsive to the user selecting the input source using the input source selection menu (column 8, lines 10-31 of Steele – *input video selected results display of function selection menu*).

Further regarding claim 116: Steele discloses that the user interface display outputs the output source selection menu responsive to the user selecting the multimedia function using the function selection menu (column 8, lines 14-23 of Steele - *selected thumbnails, which can then be used in selecting intermediate points, are displayed according to user selection*).

Further regarding claim 117: Chino discloses that the user interface display on the multifunction printer further displays a sub-menu for displaying options to the user specific to the user-selected multimedia function, wherein the sub-menu is displayed responsive to the user selecting one of the video range selection functions and the audio range selection functions from the function selection menu (column 7, lines 52-64 of Chino – *selection of multimedia function opens interactive sub-menu which interacts with user to provide information regarding function execution and state of apparatus*).

Regarding claim 118: Sugiyama discloses that the user interface display on the multifunction printer further displays a preview menu (figure 4 of Sugiyama) for displaying a preview of the printable representation to the user responsive to the user selecting the multimedia function (column 5, line 50 to column 6, line 5 of Sugiyama – *multi-frame preview displayed before printing or other operation selected based on preview image*) using the function selection menu (*as per* combination set forth above in rejection of claim 1).

Further regarding claim 119: Steele discloses that the preview includes a timeline of the multimedia data indicating results of applying the multi-media function to the time-based media data along the timeline (figure 7(52); and column 8, lines 14-23 and lines 48-55 of Steele).

Further regarding claim 120: Steele discloses that the preview includes user-selectable options for refining parameters of the multimedia function, the user interface display updating the timeline responsive to the user changing the parameters (column 9, lines 32-52 of Steele - *user selection refines time intervals between key frames, and the timeline is updated accordingly*).

Regarding claim 123: Sugiyama discloses that the user interface display (as taught by combination of Sugiyama in view of Steele and Chino as set forth in prior art rejection of claim 1) further displays a user-selectable print function for printing the printable representation, and wherein the first output device prints the printable representation responsive to the input device receiving a selection of the print function from the user (figure 1(23) and column of Sugiyama).

Art Unit: 2625

5. Claims 5-6 and 82-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Kametani (US-5,091,948).

Regarding claims 5 and 82: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes applying a speaker segmentation function to the time-based media data.

Kametani discloses applying a speaker segmentation function to time-based media data (figure 3d and column 5, lines 5–9 and lines 29-33 of Kametani).

Sugiyama in view of Steele and Chino is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker segmentation function to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker segmentation function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 5 and 82.

Further regarding claims 6/1, 6/5, and 83/78, 83/82: Kametani discloses applying a speaker recognition function to said time-based media data (column 5, lines 29-35 of Kametani).

6. Claims 9-11, 14, 86-88 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Halverson (US-2002/0101513 A1).

Regarding claims 9 and 86: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes applying a speech recognition function to said time-based media data.

Halverson discloses applying a speech recognition function to time-based media data (para. 24, lines 2-5 and para. 25, lines 21-23 of Halverson).

Sugiyama in view of Steele and Chino is combinable with Halverson because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speech recognition function, as taught by Halverson. The motivation for doing so would have been that speech is a useful and natural form of human input (para. 25, lines 11–14 of Halverson). Therefore, it would have been

Art Unit: 2625

obvious to combine Halverson with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 9 and 86.

Further regarding claims 10 and 87: Halverson discloses applying a profile analysis function to the time-based media data (para. 23, lines 4-7 of Halverson).

Further regarding claims 11 and 88: Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino). The system detects when audio data is intended to be input by the user, while any other noise is ignored by the system (column 14, lines 8-18 of Chino).

Further regarding claims 14 and 91: Chino discloses applying a sound source localization function to time-based media data (column 13, lines 5-14 of Chino). By using the gaze object detection portion of the multi-modal interface apparatus, the audio sound source localization is determined.

7. Claims 12-13, 89-90 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), Halverson (US-2002/0101513 A1), and Kametani (US-5,091,948).

Regarding claims 12 and 89: Sugiyama in view of Steele, Chino and Halverson does not disclose expressly that said multi-media function includes applying a speaker recognition function to said time-based media data.

Kametani discloses applying a speaker recognition function to said time-based media data (column 5, lines 29-35 of Kametani).

Sugiyama in view of Steele, Chino and Halverson is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker recognition function to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker recognition function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele, Chino and Halverson to obtain the invention as specified in claims 12 and 89.

Regarding claims 13 and 90: Sugiyama in view of Steele, Chino and Halverson does not disclose expressly that said multimedia function includes applying a speaker segmentation function to the time-based media data.

Kametani discloses applying a speaker segmentation function to time-based media data (figure 3d and column 5, lines 5-9 and lines 29-33 of Kametani).

Sugiyama in view of Steele, Chino and Halverson is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker segmentation function to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker segmentation function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele, Chino and Halverson to obtain the invention as specified in claims 13 and 90.

Regarding claim 121: Sugiyama in view of Steele does not disclose expressly that the plurality of user-selectable audio range selection functions on the function selection menu displayed by the user interface display on the multi function printer comprises at least one of an event detection function, a speaker segmentation function, a speaker recognition function, a sound source location function, a speech recognition function, and a profile analysis function.

Chino discloses applying audio event detection to the time-based media data (column 14, lines 8-18 of Chino – *the system detects when audio data is intended to be input by the user, while any other noise is ignored by the system*); and applying a sound source location function to time-based media data (column 13, lines 5-14 of Chino – *by using the gaze object detection portion of the multi-modal interface apparatus, the audio sound source localization is determined*).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the user to select the detection of audio data events, as taught by Chino. The motivation for doing so would have been to prevent unintended and erroneous audio input (column 14, lines 10-11 of Chino). Further, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the user to apply a sound source location function to the time-based media data, as taught by Chino. The motivation for doing so would have been to ensure that user input is intended, and the user is not speaking to someone else (column 1, lines 52-58 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele.

Sugiyama in view of Steele and Chino does not disclose expressly that the plurality of user-selectable audio range selection functions on the function selection menu displayed by the user interface display on the multi function printer also comprises at least one of a speaker segmentation function, a speaker recognition function, a speech recognition function, and a profile analysis function.

Art Unit: 2625

Halverson discloses applying a speech recognition function to time-based media data (para. 24, lines 2-5 and para. 25, lines 21-23 of Halverson); and applying a profile analysis function to the time-based media data (para. 23, lines 4-7 of Halverson).

Sugiyama in view of Steele and Chino is combinable with Halverson because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speech recognition function, as taught by Halverson. The motivation for doing so would have been that speech is a useful and natural form of human input (para. 25, lines 11-14 of Halverson). Therefore, it would have been obvious to combine Halverson with Sugiyama in view of Steele and Chino.

Sugiyama in view of Steele, Chino and Halverson does not disclose expressly that the plurality of user-selectable audio range selection functions on the function selection menu displayed by the user interface display on the multi function printer also comprises at least one of a speaker segmentation function, and a speaker recognition function.

Kametani discloses applying a speaker segmentation function to time-based media data (figure 3d and column 5, lines 5-9 and lines 29-33 of Kametani); and applying a speaker recognition function to said time-based media data (column 5, lines 29-35 of Kametani).

Sugiyama in view of Steele, Chino and Halverson is combinable with Kametani because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a speaker segmentation function to said time-based media data, as taught by Kametani. The motivation for doing so would have been that using a speaker segmentation function extracts parameters that uniquely identify a speaker, thus improving the level of speaker discrimination (column 5, lines 29-35 of Kametani). Therefore, it would have been obvious to combine Kametani with Sugiyama in view of Steele, Chino and Halverson to obtain the invention as specified in claim 121.

8. Claims 17, 25-31, 76, 94 and 102-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Krumm (US-6,611,622 B1).

Regarding claims 17 and 94: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes applying a color histogram analysis function to said time-based media data.

Art Unit: 2625

Krumm discloses applying a color histogram analysis function to time-based media data (figure 2 (202) and column 8, lines 46-47 of Krumm).

Sugiyama in view of Steele and Chino is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a color histogram analysis function to the time-based media data, as taught by Krumm. The motivation for doing so would have been to better identify people or objects in scenes generated subsequent to a model scene (column 8, lines 53-58 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 17 and 94.

Regarding claims 25 and 102: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes applying a foreground/background segmentation function to said time-based media data.

Krumm discloses applying a foreground/background segmentation function to time-based media data (column 10, lines 13-15 of Krumm).

Sugiyama in view of Steele and Chino is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a foreground/background segmentation function to the time-based media data, as taught by Krumm. The motivation for doing so would have been that the foreground segment is needed to further segment for the purpose of identifying people and objects in an image (column 10, lines 15-18 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 25 and 102.

Regarding claims 26 and 103: Sugiyama in view of Steele does not disclose expressly that said multimedia function includes applying a scene segmentation function to said time-based media data.

Krumm discloses applying a scene segmentation function to time-based media data (column 10, lines 15-18 of Krumm).

Sugiyama in view of Steele is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a scene segmentation function to the time-based media data, as taught by Krumm. The motivation for doing so would have been that segmenting the foreground scene is needed to identify people and objects in an image (column 10, lines

Art Unit: 2625

15-18 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele to obtain the invention as specified in claims 26 and 103.

Further regarding claims 27 and 104: Chino discloses applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Further regarding claims 28 and 105: Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Further regarding claims 29 and 106: Chino discloses applying an optical character recognition function to time-based media data (figure 3(102j) and column 7, lines 14–18 of Chino).

Further regarding claims 30 and 107: Chino discloses applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Further regarding claims 31 and 108: Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino).

Regarding claim 76: Sugiyama in view of Steele and Chino does not disclose expressly that the second output device is a flash memory device.

Krumm discloses outputting computer data to a flash memory device (column 7, lines 27-33 of Krumm).

Sugiyama in view of Steele and Chino is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be the flash memory device taught by Krumm. The suggestion for doing so would have been that a flash memory device is one of many possible useful output devices available to those of ordinary skill in the art (column 7, lines 27-36 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele and Chino to obtain the invention as specified in claim 76.

9. Claims 24 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Kim (US-6,594,377 B1).

Regarding claims 24/1, 24/23, 101/78 and 101/100: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes a distance estimation function to the time-based media data.

Kim discloses applying a distance estimation to image media data (column 3, lines 33-36 of Kim).

Art Unit: 2625

Sugiyama in view of Steele and Chino is combinable with Kim because they are from the same field of endeavor, namely the control and processing of media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply distance estimation, as taught by Kim, to the time-based media data. The motivation for doing so would have been to determine if the user, or a relevant part of the user, is within the required operational range (column 4, lines 28-34 of Kim). Therefore, it would have been obvious to combine Kim with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 24/1, 24/23, 101/78 and 101/100.

10. Claims 32-34 and 109-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Gerber (US-5,568,406).

Regarding claims 32 and 109: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes applying an automobile recognition function to said time-based media data.

Gerber discloses applying an automobile recognition function to time-based media data (column 8, lines 42-45 of Gerber).

Sugiyama in view of Steele and Chino is combinable with Gerber because they are from the same field of endeavor, namely the control and processing of time-based image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply an automobile recognition function to said time-based media data, as taught by Gerber. The motivation for doing so would have been to determine from the time-based media data whether or not the automobile in the time-based media data is stolen (column 8, lines 45-46 of Gerber). Therefore, it would have been obvious to combine Gerber with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 32 and 109.

Further regarding claims 33 and 110: Chino discloses applying a motion analysis function to time-based media data (figure 3(102f) and column 7, lines 33-38 of Chino).

Regarding claims 34 and 111: Sugiyama in view of Steele and Chino does not disclose expressly that said multimedia function includes applying a license plate recognition function to said time-based media data.

Gerber discloses applying a license plate recognition function to time-based media data (column 3, lines 42-47 and lines 63-64 of Gerber).

Art Unit: 2625

Sugiyama in view of Steele and Chino is combinable with Gerber because they are from the same field of endeavor, namely the control and processing of time-based image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a license plate recognition function to said time-based media data, as taught by Gerber. The motivation for doing so would have been to determine from the time-based media data whether or not the automobile in the time-based media data is stolen (column 1, line 66 to column 2, line 2 of Gerber). Therefore, it would have been obvious to combine Gerber with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 34 and 111.

11. Claims 36-39, 44-45, 51-58, 63, 73 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Hymel (US-2003/0220988 A1).

Regarding claims 36-39 and 44-45: Sugiyama in view of Steele and Chino does not disclose expressly that said user interface display is configured to allow a user to control a compact disc (CD) device, a digital video disc (DVD) device, an audio tape device, a video tape device, a MIDI player, and/or a cellular telephone.

Hymel discloses a user interface display configured to allow a user to control (para. 10, lines 1-5 of Hymel) a compact disc (CD) device (para. 10, lines 14-15 and lines 19-20 of Hymel), a digital video disc (DVD) device (para. 10, lines 14-15 and lines 20-21 of Hymel), an audio tape device (audio tape device is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), a video tape device (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), a MIDI player (MIDI player is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), and/or a cellular telephone (para. 10, lines 14-15 of Hymel).

Sugiyama in view of Steele and Chino is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface display so that the user interface allows a user to control a compact disc (CD) device, a digital video disc (DVD) device, an audio tape device, a video tape device, a MIDI player, and/or a cellular telephone, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions

Art Unit: 2625

(para. 2, lines 1-6 of Hymel). Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 36-39 and 44-45.

Regarding claims 51-58, 63, 73 and 75: Sugiyama in view of Steele and Chino does not disclose expressly that the second output device is a DVD drive, CD drive, audio tape drive, video cassette device, removable media device, embedded audio recorder, embedded video recorder, non-volatile storage device, cellular telephone, hardware for performing audio capture, and/ or a disposable media writer.

Hymel discloses a user interface configured to allow a user to control as an output device (para. 10, lines 1-5 of Hymel) a DVD drive (para. 10, lines 14-15 and lines 20-21 of Hymel), CD drive (para. 10, lines 14-15 and lines 19-20 of Hymel), audio tape drive (audio tape drive is a type of audio player, MP3 player is merely an example) (para. 10, lines 14-15 and line 19 of Hymel), video cassette device (digital camcorder, which, as is well-known in the art, uses a digital video (DV) cassette tape) (para. 10, lines 14-15 and line 20 of Hymel), removable media device (the compact discs used in compact disc devices are well-known to be removable media devices) (para. 10, lines 14-15 and lines 19-20 of Hymel), embedded (para. 10, lines 22-26 of Hymel) audio recorder (para. 10, lines 14-15 and line 19 of Hymel), embedded (para. 10, lines 22-26 of Hymel) video recorder (para. 10, lines 14-15 and line 20 of Hymel), non-volatile storage device (compact disc devices and digital video disc devices are well-known to be non-volatile storage media devices) (para. 10, lines 14-15 and lines 19-21 of Hymel), cellular telephone (para. 10, lines 14-15 of Hymel), hardware for performing audio capture (as is well-known in the art, part of the function of a digital camcorder is to capture audio signals, along with the video) (para. 10, lines 14-15 and line 20 of Hymel), and/or a disposable media writer (compact discs (CD-R's) and digital video discs (DVD±R's) are well-known to be disposable media) (para. 10, lines 14-15 and lines 19-21 of Hymel).

Sugiyama in view of Steele and Chino is combinable with Hymel because they are from similar problem solving areas, namely the control of data storage and output. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be a DVD drive, CD drive, audio tape drive, video cassette device, removable media device, embedded audio recorder, embedded video recorder, non-volatile storage device, cellular telephone, hardware for performing audio capture, and/or a disposable media writer, as taught by Hymel. The motivation for doing so would have been to allow a user to connect a variety of different types of peripheral devices to an overall system, thus allowing the user to perform a variety of functions (para. 2, lines 1-6 of Hymel).

Art Unit: 2625

Therefore, it would have been obvious to combine Hymel with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 51-58, 63, 73 and 75.

12. Claims 40-41, 49, 59-61, 69 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Stevens (US-2002/0010641 A1).

Regarding claims 40-41 and 49: Sugiyama in view of Steele and Chino does not disclose expressly that said user interface display is configured to allow a user to control a multimedia server, encryption hardware, and/or a radio receiver.

Stevens discloses a user interface display (figure 3(104) of Stevens) configured to allow a user to control a multimedia server (para. 53, lines 6-10 of Stevens), encryption hardware (para. 54, lines 1-9 of Stevens), and a radio receiver (figure 3 (110) and para. 36, lines 1-8 of Stevens).

Sugiyama in view of Steele and Chino is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface display to allow a user to control encryption hardware and a radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 40-41 and 49.

Regarding claims 59-61, 69 and 77: Sugiyama in view of Steele and Chino does not disclose expressly that the second output device is an embedded multimedia server, audio encryption hardware, video encryption hardware, a satellite radio receiver and/or a wireless device.

Stevens discloses controlling as an output device an embedded multimedia server (para. 53, lines 6-10 of Stevens), audio encryption hardware (para. 54, lines 1-4 and para. 57, lines 3-4 of Stevens), video encryption hardware (para. 54, lines 1-4 of Stevens), a satellite radio receiver (para. 36, lines 1-6 of Stevens), and/or a wireless device (para. 36, lines 1-6 of Stevens). As is well-known in the art, a satellite radio receiver is a type of wireless device.

Sugiyama in view of Steele and Chino is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be an embedded multimedia server, audio encryption hardware, video encryption hardware, and/or

Art Unit: 2625

a satellite radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele and Chino to obtain the invention as specified in claims 59-61, 69 and 77.

13. Claims 46, 64, 66-68 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), Stevens (US-2002/0010641 A1), and McCarthy (US-6,296,693 B1).

Regarding claim 46: Sugiyama in view of Steele and Chino does not disclose expressly that said user interface display is configured to allow a user to control a two-way radio.

Stevens discloses a user interface display (figure 3(104) of Stevens) configured to allow a user to control a radio receiver (figure 3(110) and para. 36, lines 1-8 of Stevens).

Sugiyama in view of Steele and Chino is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface display to allow a user to control a radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio and video data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele and Chino.

Sugiyama in view of Steele, Chino and Stevens does not disclose expressly that said radio is specifically a two-way radio.

McCarthy discloses using a two-way (CB) radio (column 7, lines 13-16 and lines 21-23 of McCarthy).

Sugiyama in view of Steele, Chino and Stevens is combinable with McCarthy because they are from similar problem solving areas, namely the control of data communication hardware. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for user control of a radio, as taught by Stevens, wherein said radio is specifically a two-way radio, as taught by McCarthy. The motivation for doing so would have been to provide the user with means of personal communication. Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Steele, Chino and Stevens to obtain the invention as specified in claim 46.

Regarding claims 64, 66-68 and 71: Sugiyama in view of Steele and Chino does not disclose expressly that the second output device is a two-way radio, a radio receiver for receiving AM signals, a

Art Unit: 2625

radio receiver for receiving FM signals, a radio receiver for receiving short wave radio signals, and/or an emergency alert monitor for receiving emergency broadcast system alerts.

Stevens discloses controlling as an output device a radio receiver (para. 36, lines 1-6 of Stevens).

Sugiyama in view of Steele and Chino is combinable with Stevens because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the second output device be a radio receiver, as taught by Stevens. The motivation for doing so would have been to allow users to retrieve desired distributions of audio data over a controlled broadcast (para. 4, lines 1-5 of Stevens). Therefore, it would have been obvious to combine Stevens with Sugiyama in view of Steele and Chino.

Sugiyama in view of Steele, Chino and Stevens does not disclose expressly that said radio receiver is a two-way radio, a radio receiver for receiving AM signals, a radio receiver for receiving FM signals, a radio receiver for receiving short wave radio signals, and/or an emergency alert monitor for receiving emergency broadcast system alerts.

McCarthy discloses output devices including a two-way (CB) radio (column 7, lines 13-16 and lines 21-23 of McCarthy), a radio receiver for receiving AM signals (column 7, lines 13-16 and lines 20-21 of McCarthy), a radio receiver for receiving FM signals (column 7, lines 13-16 and lines 20-21 of McCarthy), a radio receiver for receiving short wave radio signals (column 7, lines 13-16 and lines 21-23 of McCarthy), and/or an emergency alert monitor for receiving emergency broadcast system alerts (column 7, lines 13-16 and lines 18-20 of McCarthy).

Sugiyama in view of Steele, Chino and Stevens is combinable with McCarthy because they are from similar problem solving areas, namely the control of data communication hardware. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide for user control of a radio, as taught by Stevens, wherein said radio is specifically a two-way radio, a radio receiver for receiving AM signals, a radio receiver for receiving FM signals, a radio receiver for receiving short wave radio signals, and/or an emergency alert monitor for receiving emergency broadcast system alerts, as taught by McCarthy. The motivation for doing so would have been to provide the user with means of personal communication. Therefore, it would have been obvious to combine McCarthy with Sugiyama in view of Steele, Chino and Stevens to obtain the invention as specified in claims 64, 66-68 and 71.

Art Unit: 2625

14. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Wedekind (US-5,115,967).

Regarding claim 48: Sugiyama in view of Steele and Chino does not disclose expressly that said user interface display is configured to allow a user to control a climate sensor.

Wedekind discloses computer control (column 4, lines 53-58 of Wedekind) of a climate sensor (column 5, lines 3-9 of Wedekind).

Sugiyama in view of Steele and Chino is combinable with Wedekind because they are from the same field of endeavor, namely the control and processing of time-based data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure said user interface display to allow a user to control a climate sensor, as taught by Wedekind. The motivation for doing so would have been to control the overall climate of the room or building in which the printer system user is located. Therefore, it would have been obvious to combine Wedekind with Sugiyama in view of Steele and Chino to obtain the invention as specified in claim 48.

15. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Rowe (US-2001/0003846 A1).

Regarding claim 70: Sugiyama in view of Steele and Chino does not disclose expressly that the second output device is a weather alert receiver.

Rowe discloses controlling as an output device a weather alert receiver (para. 62, lines 3-6 of Rowe).

Sugiyama in view of Steele and Chino is combinable with Rowe because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a weather alert receiver as an output device, as taught by Rowe. The suggestion for doing so would have been that weather alert data is simply another form of useful multi-media data that a user may wish to obtain. Therefore, it would have been obvious to combine Rowe with Sugiyama in view of Steele and Chino to obtain the invention as specified in claim 70.

16. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), and Abgrall (US-6,373,498 B1).

Regarding claim 72: Sugiyama in view of Steele and Chino does not disclose expressly that the second output device is a weather alert receiver.

Abgrall discloses controlling as an output device hardware for performing VGA screen captures (column 12, lines 6-8 of Abgrall).

Sugiyama in view of Steele and Chino is combinable with Abgrall because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use hardware to perform VGA screen captures, as taught by Abgrall. The suggestion for doing so would have been that a VGA screen capture is simply another form of useful multi-media data that a user may wish to obtain. Therefore, it would have been obvious to combine Abgrall with Sugiyama in view of Steele and Chino to obtain the invention as specified in claim 72.

17. Claim 122 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama (US-5,633,723) in view of Steele (US-5,884,056), Chino (US-6,118,888), Krumm (US-6,611,622 B1), and Kim (US-6,594,377 B1).

Further regarding claim 122: Steele discloses applying a video event detection function to the time-based media data (column 7, lines 49-54 of Steele).

Sugiyama in view of Steele does not disclose expressly that the plurality of user-selectable video range selection functions on the function selection menu displayed by the user interface display on the multi function printer also comprises at least one of a color histogram analysis, a face detection function, a face recognition function, an optical character recognition function, a motion analysis function, a distance estimation function, and a foreground/background segmentation function.

Chino discloses applying a face detection function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino); applying a face recognition function to time-based media data (figure 20(406) and column 24, lines 25–27 of Chino); applying an optical character recognition function to time-based media data (figure 3(102j) and column 7, lines 14–18 of Chino); and applying a motion analysis function to time-based media data (figure 3(102f) and column 7, lines 33-38 of Chino).

Sugiyama in view of Steele is combinable with Chino because they are from the same field of endeavor, namely the control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face detection function to time-based media data, as taught by Chino. The motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Further, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a face recognition function to time-based media data, as taught by Chino. The

Art Unit: 2625

motivation for doing so would have been to determine which particular user corresponds to the current user by recognition of the current user's face (column 26, lines 20-22 of Chino). Further, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply an optical character recognition function to time-based media data, as taught by Chino. The suggestion for doing so would have been that character recognition from an electronic pen is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Further, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a motion analysis function to time-based media data, as taught by Chino. The suggestion for doing so would have been that detection of a user's motion and gestures is simply another useful electronic means to input data into a computerized system (figure 3 and column 7, lines 2-11 of Chino). Therefore, it would have been obvious to combine Chino with Sugiyama in view of Steele.

Sugiyama in view of Steele and Chino does not disclose expressly that the plurality of user-selectable video range selection functions on the function selection menu displayed by the user interface display on the multi function printer also comprises at least one of a color histogram analysis, a distance estimation function, and a foreground/background segmentation function.

Krumm discloses applying a color histogram analysis function to time-based media data (figure 2 (202) and column 8, lines 46-47 of Krumm); and applying a foreground/background segmentation function to time-based media data (column 10, lines 13-15 of Krumm).

Sugiyama in view of Steele is combinable with Krumm because they are from the same field of endeavor, namely control and processing of time-based media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a color histogram analysis function to the time-based media data, as taught by Krumm. The motivation for doing so would have been to better identify people or objects in scenes generated subsequent to a model scene (column 8, lines 53-58 of Krumm). Further, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply a scene segmentation function to the time-based media data, as taught by Krumm. The motivation for doing so would have been that segmenting the foreground scene is needed to identify people and objects in an image (column 10, lines 15-18 of Krumm). Therefore, it would have been obvious to combine Krumm with Sugiyama in view of Steele.

Sugiyama in view of Steele, Chino and Krumm does not disclose expressly that the plurality of user-selectable video range selection functions on the function selection menu displayed by the user interface display on the multi function printer also comprises a distance estimation function.

Art Unit: 2625

Kim discloses applying a distance estimation to image media data (column 3, lines 33-36 of Kim).

Sugiyama in view of Steele is combinable with Kim because they are from the same field of endeavor, namely the control and processing of media data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply distance estimation, as taught by Kim, to the time-based media data. The motivation for doing so would have been to determine if the user, or a relevant part of the user, is within the required operational range (column 4, lines 28-34 of Kim). Therefore, it would have been obvious to combine Kim with Sugiyama in view of Steele, Chino and Krumm to obtain the invention as specified in claim 122.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/James A Thompson/
Examiner, Art Unit 2625

29 August 2008